IN THE CLAIMS

There are no current amendments to the claims.

1. (Previously amended) A device for air-conditioning a passenger compartment of a motor vehicle, comprising:

a refrigerant-fluid circuit including a compressor, a condenser serving as a heat sink and a first evaporator serving as a cold source, the device further including a heating radiator and a second evaporator and switching means for selectively routing fluid flow between one of and both the first and second evaporators depending on a required cooling power, the first and second evaporators being traversed on after the other at least partly by an airflow to be cooled; wherein said heating radiator and said second evaporator form a compound heat exchanger comprising two fluid chambers arranged on either side of a bank of tubes.

2. (Original) The device of Claim 1, in which the switching means are able, moreover, to make the fluid flow only in the second evaporator.

3. (Original) The device of Claim 2, in which the switching means are able to make the fluid flow alternately in the first and second evaporators.

4. (Original) The device of Claim 2, in which the first and second evaporators have different cold-production capacities.

5. (Original) The device of claim 1, in which the switching means include means for

making the fluid flow in an additional heating loop containing the second evaporator and not containing the condenser nor the first evaporator, the second evaporator then serving as heat source.

6. (Original) The device of claim 5, in which the additional heating loop contains, between the outlet of the second evaporator and the inlet of the condenser, a pressure-reducing valve in parallel with bypass means which can be closed off, allowing the fluid to pass through this pressure-reducing valve when the second evaporator is serving as heat source and to avoid it when the second evaporator is serving as cold source.

7. (Original) The device of Claim 5, in which the said circuit includes a unit module linked to the inlet of the compressor, to the outlet of the condenser, to the inlet and to the outlet of the first evaporator, to an external junction point situated between the outlet of the compressor and the inlet of the second evaporator and to the outlet of the latter, the said module containing at least one anti-return valve arranged between the outlet of the first evaporator and the inlet of the compressor, an internal junction point linked to the outlet of the condenser, a first pressure-reducing valve interposed between the internal junction point and the inlet of the first evaporator, and a stop valve and a second pressure-reducing valve which are interposed between the internal junction point and the inlet of the second evaporator.

8. (Original) The device of Claim 5, in which the additional heating loop further contains, between the second evaporator and the compressor, a pressure-reducing valve followed by a supplementary heat exchanger able to extract heat from an outside environment, and

operates as heat pump.

9. (Original) The device of Claim 8, in which means are provided for allowing the fluid to circumvent the supplementary heat exchanger and the associated pressure-reducing valve when it is flowing in the two evaporators.

10. (Original) The device of Claim 1, in which the switching means are able to make the fluid leaving the compressor flow first of all in the second evaporator, which then plays the role of condenser, then in two branches, in parallel, respectively containing the first evaporator and the condenser, which then plays the role of evaporator, before bringing it back to the compressor.

11. (Original) The device of Claim 1, in which the two evaporators, as cold sources, are arranged mutually in parallel in the circuit.

12. (Original) The device of Claim 1, in which the two evaporators, as cold sources, are arranged mutually in series in the circuit.

13. (Original) The device of Claim 12, in which the circuit further includes means for setting the throughput and/or the pressure of the fluid sent into the evaporators as a function of the pressure and/or of the temperature of the fluid leaving one and/or the other of the evaporators.

14. (Original) The device of Claim 1, in which one of the first and second evaporators

forms, with a radiator for heating the passenger compartment, a compound heat exchanger in which an airflow to be cooled or to be heated is in thermal contact both with the refrigerant fluid of the said circuit and with a heat-carrying fluid supplying the said radiator.

15. (Original) The device of Claim 14, in which the said compound heat exchanger comprises two fluid chambers supplied respectively with refrigerant fluid and with heat-carrying fluid, which are arranged at opposite ends to one another with respect to a bank of tubes, each tube having a U-shaped configuration in which the ends of the two branches communicate with one of the fluid chambers, in such a way as to be traversed by the corresponding fluid, this fluid being alternately the refrigerant fluid and the heat-carrying fluid in the direction of the airflow.

16. (Original) The device of Claim 1, in which one of the first and second evaporators forms, with a first heat exchanger in which a heat-carrying fluid flows, a compound heat exchanger in which the said refrigerant fluid exchanges heat with the said heat-carrying fluid, the latter also flowing in a second heat exchanger intended to heat or to cool a region of the passenger compartment other than that receiving the said airflow, and/or in a reservoir allowing storage of heat or of cold.

17. (Original) The device of Claim 1, in which the first evaporator, a radiator for heating the passenger compartment and the second evaporator are traversed successively in that order by an airflow to be cooled or to be heated.

18. (Previously amended) A device for air-conditioning a passenger compartment of a motor vehicle having a refrigerant fluid circuit comprising:

a heating radiator;

a compressor,

a condenser serving as a heat sink;

a first evaporator serving as a cold source,

a second evaporator; and

a switching mechanism disposed to selectively route fluid flow between one of and both the first and second evaporators depending on a required cooling power; wherein said heating radiator and said second evaporator form a compound heat exchanger comprising two fluid chambers arranged on either side of a bank of tubes.

19. (Previously added) The device according to claim 18, wherein said switching mechanism is disposed and adapted to route fluid flow solely between one of said first evaporator only and through both said first and second evaporators.

20. (Previously added) The device according to claim 1, wherein said switching means is disposed and adapted to route fluid flow solely between one of said first evaporator only and through both said first and second evaporators.